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3 boost converting and power factor correcting an ac  
4 input signal to a second ac signal; and  
5 changing the second ac signal into a third signal  
6 having a current suitable for welding, cutting or heating.

(2) 1 36. (Amended) The method of claim 34 further  
2 including providing control signals to a converter.

1 42. (Amended) The apparatus of claim 41, wherein the  
2 output means includes a pulse width modulator.

1 45. (Amended) A weldment or metal cut formed by a  
2 process which comprises:  
3 boost converting and power factor correcting an ac  
4 input signal to a second ac signal; and  
5 changing the second ac signal into a third signal  
6 having a current suitable for welding or cutting.